

New Diagnosis Guide Could Add Two Million to Diabetes Roster

“We now have conclusive data from population-based research that show serious complications of diabetes begin earlier than previously thought,” said James R. Gavin III, MD PhD, of the Howard Hughes Medical Institute and chair of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus.

The Committee recommended lowering the threshold to a value of 126 milligrams per deciliter (mg/dl) on the most commonly used test for diabetes, fasting plasma glucose. Another recommendation was that widescale screening and testing to detect diabetes at an earlier stage should be considered in an attempt to prevent or delay the onset of serious and costly complications. These recommendations were accepted and are supported by the American Diabetes Association, the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), and the Division of Diabetes Translation of the Centers for Disease Control and Prevention (CDC).

The Committee also recommended that the health care community consider testing for diabetes in all adults at age 45 and repeat testing at three-year intervals. Testing should be considered at a younger age or should be carried out more frequently in those at high risk for diabetes. People at high risk are those who:

- are more than 20% above their ideal body weight;
- have a first-degree relative with diabetes;
- are members of a high risk group (African American, Hispanic, Native American, Asian);
- have delivered a baby weighing more than nine pounds or were diagnosed with gestational dia-

betes mellitus, a condition that can arise during pregnancy and usually disappears thereafter but tends to lead to Type 2 diabetes in later years;

- have blood pressure readings at or above 140/90;
- have a high density lipoprotein cholesterol level of 35 mg/dl or lower or a triglyceride level of 250 mg/dl or higher; or
- on previous testing, had impaired fasting glucose or impaired glucose tolerance.

Approximately 16 million Americans have diabetes. Widespread and consistent use of the FPG test, with appropriate screening and retesting, could help identify up to two million of the eight million undiagnosed Americans with diabetes, according to Frank Vinicor, MD MPH, of the CDC and Richard Eastman, MD, of the NIDDK.

The committee defined a value of 110 mg/dl on the FPG as the upper limit of normal blood glucose. The committee also recognized two categories of impaired glucose metabolism (or impaired glucose homeostasis) that are considered risk factors for future diabetes and cardiovascular disease—fasting plasma glucose between 110 mg/dl and 126 mg/dl or readings between 140 mg/dl and 200 mg/dl in the two-hour sample on the glucose tolerance test.

The committee’s work is an update of a similar process last undertaken in 1979 by the National Diabetes Data Group, and its recommendations are based on a review of more than 15 years of research. The committee was convened under the auspices of the American Diabetes Association.

The committee recommended eliminating the old categories of insulin-dependent diabetes mellitus (IDDM) and noninsulin-dependent diabetes mellitus (NIDDM) because they are based on treatments that can

vary considerably and do not indicate the underlying problem. The committee said the two new categories should now be Types 1 and 2.

DHHS Proposes New HIV-AIDS Treatment Guidelines

A combination antiretroviral therapy—preferably with three drugs including a protease inhibitor—is the recommended treatment for people with AIDS who meet the Centers for Disease Control and Prevention definition of the disease, according to comprehensive proposed new *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents*.

The guidelines were developed by the Panel on Clinical Practices for Treatment of HIV Infection, which was convened jointly by the Department of Health and Human Services (DHHS) and the Henry J. Kaiser Family Foundation.

“The decisions about treatments for people with HIV-AIDS should be guided by regular monitoring of the amount of HIV in the patient’s blood (viral load) as well as the number of CD4+ T cells, the immune system cells that fight infection,” said Anthony S. Fauci, MD, Director of the National Institute of Allergy and Infectious Diseases, National Institutes of Health. Dr. Fauci and John G. Bartlett, MD, Professor of Medicine and Chief of Infectious Diseases at Johns Hopkins University School of Medicine, co-chaired the panel that included Federal, private sector, and academic experts in the clinical treatment and care of HIV-infected people as well as representatives of AIDS interest groups, health policy groups, and payer organizations.

The guidelines recommend starting treatment with three drugs and changing at least two drugs when there are indications that treatment is failing, such as when HIV levels in the

blood increase. Treatment with only two drugs, in general, is considered less than optimal. Treatment with only one drug is not recommended. However, one monotherapy is recommended: to prevent HIV transmission to a baby, Zidovudine (AZT) alone should be given to relatively healthy HIV-infected pregnant women who do not require antiretroviral drugs for their own treatment.

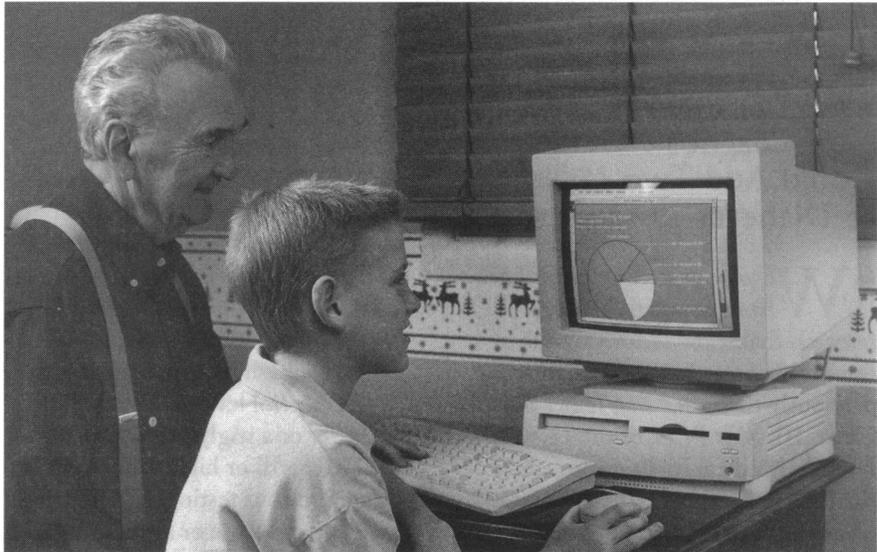
DHHS Secretary Donna E. Shalala praised the panel for its efforts. "We are providing much-needed guidance to patients and medical practitioners," she said. "We have reason to celebrate that a diagnosis of HIV disease is no longer an automatic death sentence."

The guidelines of the Panel on Clinical Practices relied in part on the *Report of the NIH Panel to Define Principles of Therapy of HIV Infection*. This NIH panel, sponsored by the NIH Office of AIDS Research, was chaired by Charles C. Carpenter, MD, Professor of Medicine, Brown University School of Medicine. Panelists included AIDS clinicians and researchers. The mission of the NIH Panel was to review the current state of knowledge on antiretroviral therapies and to prepare a document outlining principles that would guide therapeutic decisions.

Both panels' documents were announced in the *Federal Register* in June 1997 and opened for a 30-day comment period. After the comments are considered, both documents will be published in CDC's *Morbidity and Mortality Weekly Report*.

DHHS Announces "Computers For Seniors"

Giving older Americans access to the Internet and helping them make better use of Medicare, Medicaid, and other DHHS programs is the goal of the new Computers for Seniors program announced by the Department of Health and Human Services (DHHS).



Five hundred computers, on loan from the Health Care Financing Administration (HCFA), will be located in senior centers throughout the country and supported through the Department's Administration on Aging. In addition to the HCFA website (www.hcfa.gov), seniors will be able to reach the Department's home page (www.hhs.gov), websites of the Administration on Aging (www.aoa.dhhs.gov) and the National Institute on Aging (www.nih/niia/), the "Healthfinder" site (www.healthfinder.gov), and all other Internet resources.

"HHS is committed to using Internet technology to serve all Americans better," said Secretary Donna E. Shalala. "Our department-wide web presence now includes some 62 sites, covering the full range of HHS activities and responsibilities. Many of these HHS sites, as well as many websites outside of HHS, will be of special value to older Americans, and we want to help them use this resource to the fullest."

Federal Disability, Rehabilitation Research Needs Rehabilitation

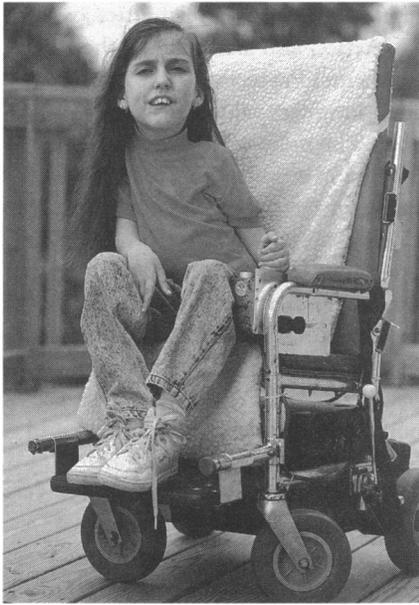
One in six Americans has some type of disabling condition, and 10 million Americans are unable to attend school, work, or care for themselves. One-quarter of these conditions involve impairments such as

amputations or spinal cord injuries; the rest are from diseases or disorders such as emphysema or multiple sclerosis. Disabilities cost the nation more than \$300 billion each year in medical costs and lost productivity.

A recent report from a committee of the Institute of Medicine contends that Federal efforts to improve the lives of people with disabilities are hampered by inadequate research funding and poor coordination among the many programs involved. The report goes on to recommend that a new Agency on Disability and Rehabilitation Research be created within the Department of Health and Human Services (DHHS) to set priorities, elevate awareness of rehabilitation science and engineering, and fund promising research.

The new Agency on Disability and Rehabilitation Research would set the Federal rehabilitation research agenda by coordinating efforts of the Department of Veterans Affairs, the National Science Foundation, and the National Institutes of Health. It would have the ability to fund interagency research and to enhance support where it identifies a need or an opportunity.

Funding for the agency would come from shifting the National Institute on Disability and Rehabilitation Research—currently in the Department of Education—to DHHS. This would foster a more research-oriented environment, emphasize the impor-



Lloyd Wolf

tance of disability and rehabilitation as a health issue, and create a more effective mechanism for coordinating the work of researchers in disparate fields, the report says.

At \$133 million each year—or less than \$7 annually for each person with a disability—the current Federal research expenditure pales when compared with the costs involved. By providing new ways of restoring function, research could substantially reduce health care costs and help stem the loss of wages and emotional distress that disabilities cause. According to the committee, three overarching goals should guide research in the field:

- to develop ways of measuring and predicting functional limitations, disability, and health outcomes among people with potentially disabling conditions;
- to identify the critical factors in the physical, social, and psychological environments that can promote or inhibit a person's ability to function.
- to create links between research and practice to ensure that new technology is quickly used to improve the lives of people with disabilities. Although many government agencies have programs to help move ideas, products, and techniques from research to

application, there is no well-organized mechanism for distributing research findings in rehabilitation science and engineering to those providing services.

The committee urged the medical education and research community to formally recognize rehabilitation science and engineering as an emerging field of study. Recognition of the field would connect the work of basic researchers more closely to the study of human disabilities and rehabilitation.

Copies of Enabling America:

Assessing the Role of Rehabilitation Science and Engineering are available from the National Academy Press at 2101 Constitution Ave. NW, Washington DC 20418; tel. 202-334-3313 or 800-624-6242. The cost of the report is \$45 (prepaid) plus shipping charges of \$4 for the first copy and 50 cents for each additional copy.

Treatment and Practice Guidelines To Appear on the Net

Increased access to the Internet is making another long-held dream of health management professionals a reality: clinical practice guidelines and treatment modalities available with the ease of a few typed keystrokes.

A to-be-developed National Guideline Clearinghouse (NGC) "will make clinical practice guidelines available to every physician, health plan, provider, purchaser, and consumer who can use a computer," said Agency for Health Care Policy and Research (AHCPR) Administrator John M. Eisenberg, MD. "It will provide access to the widest selection of guidelines available from public and private organizations by establishing an independent, interactive website, accessible by using any standard web browser or through the websites of our three organizations."

The three organizations are AHCPR, the American Association of Health Plans, and the American Medical Association. AHCPR will award a

contract for the technical work to establish the NGC. The target date for launching the new site is Fall 1998.

The development and use of clinical practice guidelines have grown markedly in the past five years. However, many existing and potential guideline users have difficulty gaining access to and keeping abreast of the many sets of guidelines currently in use. In addition, existing guidelines often differ in their development and content, further complicating their use.

To help address these issues, the NGC website will:

- contain standardized information for thousands of guidelines such as title, sponsoring organization, author(s), and methodology used;
- provide guideline abstracts and, where possible, the full text of guidelines;
- compare and contrast the recommendations of guidelines on similar topics with summaries covering major areas of agreement and disagreement;
- have topic-specific electronic mailing lists to enable registered users to communicate with one another on guideline development, dissemination, implementation, and use.

Partnership to Boost Child Immunizations in Public Housing

Despite record high immunization rates nationally, some communities lag behind in immunization rates and are at greater risk for disease outbreaks. Three Federal agencies—the Department of Health and Human Services, the Department of Housing and Urban Development, and the National Service Corps—have launched a first-of-a-kind cooperative pilot program to boost immunization rates among children living in public housing.

These pilot programs will work to raise parents' and providers' awareness about immunization needs and help families overcome obstacles such as transportation and language barriers

that can prevent their children from being vaccinated on time.

The new program will be piloted in Chicago; Kansas City, Missouri; Philadelphia; and Little Rock, Arkansas. The three sites will share an \$800,000 Federal grant. Public health and public housing officials will work jointly to establish the programs in each city.

Usually, children who have not received their recommended immunizations on time also receive less preventive health care. For example, compared with children whose immunizations are up-to-date, under-immunized children are less likely to have an adequate number of well-child visits to their health care providers. Children who are not up-to-date on their immunizations are also less likely to receive screening for anemia, lead, and tuberculosis.

The Clinton administration's comprehensive Childhood Immunization Initiative aims to increase childhood immunization rates now and put in place a system to sustain high rates into the future. The initiative focuses on building community networks, improving immunization services for needy families in public health clinics, reducing vaccine costs for lower-income and uninsured families, improving systems for monitoring diseases and vaccination rates, and improving vaccines and vaccine use.

Innovative Toxic Waste Cleanup Needs U.S. Boost

Federal action is needed to bolster the use of innovative technologies in cleaning up contaminated soil and water at many of the 300,000 to 400,000 hazardous waste sites across the nation, says a report from a committee of the National Research Council.

The Federal government, in conjunction with the states, should undertake initiatives designed to stimulate the market for innovative cleanup

technologies, to spur research on such technologies, and to promote the development of measures for judging the success of cleanup efforts that are based both on scientific criteria and on public perceptions and expectations, the committee said. To increase the demand for innovative technologies, the Federal government should create incentives so that those responsible for site contamination rapidly initiate cleanup using the best available technology. At the same time, the regulatory process needs to be more consistent so that technology developers and investors can more accurately predict their potential investment returns.

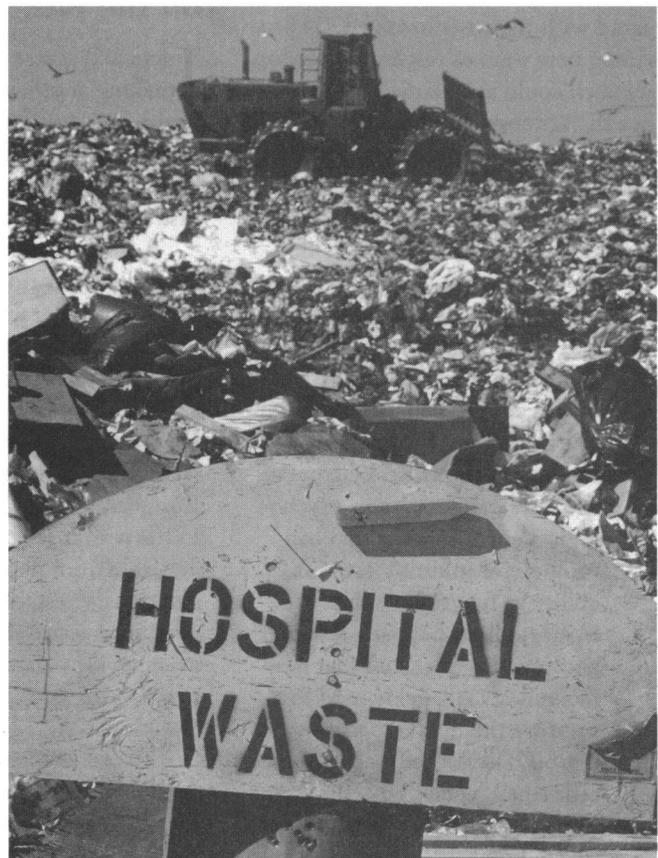
The Securities and Exchange Commission should clarify and strictly enforce requirements that publicly traded U.S. corporations report hazardous waste sites as financial liabilities, the committee said. This action would encourage companies to initiate remediation rather than delay it, in order to clear their balance sheets of this liability. Moreover, companies should have their environmental liability reporting audited by private third parties in the same way their financial reports are audited. There should be strong penalties for companies that fail such audits.

In addition, Congress should enact legislation to allow business firms to amortize the remediation liabilities they report over a 20- to 50-year period, the report says. This would ensure that companies would not risk losing major portions of their asset value as a result of the full

disclosure of cleanup liabilities.

Action also is needed by the Environmental Protection Agency (EPA), the committee said. The agency should be more consistent and even-handed in enforcing cleanup requirements of the Superfund and Resource Conservation Recovery Act (RCRA) programs. Currently, companies with sites that fall under these programs can delay cleanup with little financial risk because the likelihood of a major penalty from EPA is low. Across-the-board enforcement of Superfund and RCRA requirements would help ensure that U.S. companies which spend money on timely cleanup of contaminated soil and water would not be placed at a competitive disadvantage compared with those which save money by delaying cleanup at their sites.

EPA should establish a national registry of contaminated sites and make it publicly available on the Internet, the report says, to provide companies with an additional incentive for rapid cleanup and to give technology



developers a way to assess different segments of the environmental remediation market. EPA also should allow owners of contaminated sites to choose any remediation technology that can meet regulatory requirements for risk reduction and should make the approval process for selecting cleanup technologies faster and more consistent, the committee said. And the agency should encourage state environmental agencies to take similar steps.

Although many sectors of the economy, such as the automotive and aerospace industries, have developed uniform standards for evaluating product performance, there are no standards for judging ground water and soil cleanup technologies. Performance standards should be established to streamline the process of technology selection and to remove some of the obstacles that hamper acceptance of innovative technologies, the committee said.

EPA and state environmental regulators should begin requiring public involvement in discussions about hazardous waste site remediation as soon as a site is discovered, the committee said. A public that is well informed from the start is better prepared to participate in review of technology selection and to consider innovative methods.

When testing the performance of a decontamination technology, developers need to consider the potential concerns of the public as well as those of regulators and customers such as site owners and managers, the report says. Developers should assess a technology by its ability to reduce contaminant mass, concentration, mobility, and toxicity.

The study was sponsored by EPA, the Department of Energy, and the Department of Defense.

Copies of Innovations in Ground Water and Soil Cleanup: From Concept to Commercialization are available from the National Academy Press at 2101 Constitution Ave. NW, Washington, DC 20418; tel. 202-334-3313 or 1-800-624-6242 at a cost of \$45 (prepaid) plus shipping charges of \$4 for the first copy and 50 cents for each additional copy.

HRSA Reorganizes, Upgrades HIV-AIDS Programs, Services

The Health Resources and Services Administration (HRSA), a \$3.4-billion, 2000-employee agency within the Department of Health and Human Services, has been overhauled.

Acting Administrator Claude Earl Fox, MD MPH, said HRSA's planned reorganization streamlines agency operations, builds partnerships inside and outside the Federal government, and consolidates programs and expertise to focus on the most critical issues surrounding health care for underserved and vulnerable individuals and families.

HRSA's broad mission—to provide care and services to the nation's underserved and vulnerable citizens—requires the agency to administer more than 80 distinct programs, which range from community health centers to services for people with HIV-AIDS, from health professions training to maternal and child health.

HRSA is retooling to provide better customer service to the people who design, finance, or provide health care for underserved Americans, according to Dr. Fox. "Our HIV-AIDS, managed care, quality, and public health programs are more focused, and we've increased flexibility to respond to unmet needs," Fox said.

To create an integrated response to the HIV-AIDS epidemic, all Ryan White CARE (Comprehensive AIDS Resources Emergency) Act programs are consolidated from across the agency and elevated to a new Bureau for HIV-AIDS. These programs include formula grants to localities with high rates of HIV infection, early intervention programs, special initiatives for women and adolescents, and formula grants to states that support services—including pharmaceuticals and other treatments—for poor and uninsured people with HIV.

HRSA's other bureaus—Health Professions, Primary Health Care, and Maternal and Child Health—will be maintained and strengthened.

To help coordinate the agency's efforts to address the most pressing issues related to service for the underserved, the reorganization augments HRSA's existing Center for Managed Care with new Centers for Quality and Public Health Practice. Senior advisors for international health, women's health, and special initiatives give added emphasis to areas of critical concern.

HRSA's central office will be streamlined, and the agency's field operations will be clustered into five major offices headed by HRSA field coordinators—Northeast in Philadelphia, Southeast in Atlanta, Midwest in Chicago, West Central in Dallas, and Pacific West in San Francisco.

Our Health Depends on Global Health

The Institute of Medicine (IOM) has recently published a report, *America's Vital Interest in Global Health*, which argues that "the direct interests of the American people are best served when the United States acts decisively to promote health around the world."

The report makes a strong case using both humanitarian and self-interest arguments: Emerging infectious diseases, biological and chemical terrorism, food safety are all problems that cross boundaries. Poverty and violence are problems countries have in common. Healthy populations overseas are more politically stable and consume more goods. The United States should capitalize on its strengths in science and technology to help improve global health.

In addition, the report covers the following topics: reasons for active U.S. engagement in global health; how health and disease increasingly transcend national borders and the changing nature of global health governance; common misperceptions of Americans about U.S. investment in foreign aid; and the rationale for U.S. involvement in the fight against global disease threats. The appendix describes major U.S. departments, agencies, and other

organizations currently engaged in global health activities.

The report is available for sale from the National Academy Press, Box 285, 2101 Constitution Ave. NW, Washington DC; tel. 800-624-6242; website www.nap.edu.

Upcoming Conferences

The National Occupational Injury Research Symposium will be held October 15–17, 1997, in Morgantown, West Virginia. For more information, contact Herb Linn, NIOSH, at 304-285-5900 or Martha Brocato, DESA, Inc., at 404-634-0804, ext. 42.

The American Public Health Association (APHA) Annual Meeting will be held November 9–13, 1997, in Indianapolis, Indiana. For more information contact APHA at 202-789-5600.

The Third National Conference on the Laboratory Aspects of Tuberculosis will be held November 13–15, 1997, in Atlanta. For more information contact Anne Ulm at 202-822-5227.

The 12th National Conference on Chronic Disease Prevention and Control will be held December 3–5, 1997, in Washington, DC. For more information contact Kathleen Carey at 770-488-4239.

The 46th Annual Meeting of the American Society of Tropical Medicine and Hygiene will be held December 7–11, 1997, in Orlando, Florida. For more information contact Peter F. Weller, MD, at 847-480-9592.

The Centers for Disease Control and Prevention are cosponsoring:

- The Fourth International Conference on Hemorrhagic Fevers and Hantaviruses, March 5–7, 1988, in Atlanta.
- The International Conference on Emerging Infectious Diseases, March 8–12, 1998, in Atlanta.

The calls for abstracts and registration information for these CDC-cosponsored conferences will be available on the Web at www.cdc.gov/ncidod/ncid.htm.

Got a Pesticide Question?

Detailed answers to both simple and complex pesticide questions are now available free of charge from the National Pesticide Telecommunications Network (NPTN) sponsored by Oregon State University and the U.S. Environmental Protection Agency (EPA). Callers to a toll-free telephone number can obtain chemical, health, and environmental information about more than 600 active pesticide ingredients in more than 50,000 U.S.-registered products.

The service is targeted toward both professionals and the public, with lines staffed by pesticide specialists who have toxicology and environmental training and access to information resources from EPA documents, U.S. Department of Agriculture Cooperative Extension publications, research information, and a pesticide product database. Callers can also be directed to the appropriate organizations for pesticide incident investigations; emergency human and animal treatment; information on safety practices; cleanup and disposal; and laboratory analyses.

NPTN can be reached at 800-858-7378 from 6:30 a.m. to 4:30 p.m. Non-copyrighted materials can be mailed or faxed for a nominal fee from the Agricultural Chemistry Extension, Oregon State University, 333 Weniger, Corvallis OR 97331-6502; fax 541-737-0761; e-mail <nptn@ace.orst.edu>; website ace.orst.edu/info/nptn/.

AHCPR Guide Shows Use of Geography in Health Research

The Agency for Health Care Policy and Research (AHCPR) of the Public Health Service has published a new report, *Using Geographic Methods to Understand Health Issues*, for use by

health services researchers, policy makers, educators, health planners, and others interested in medical geography.

The report demonstrates the ways in which the methods and approaches offered by the discipline of geography can be applied to the field of health services research. With the computer programs and applications now available, it is possible to create maps and spatial interpretations that are not complex and do not require special data or systems. Data that apply to standard geographic areas can be mapped quickly and included in almost any type of printed report or visual medium.

The full-color, 24-page report describes several commonly used methods for producing maps and visual displays that can be applied for policy analysis, research, or planning purposes. It uses real-world examples to demonstrate and interpret applications that reflect both the disease ecology and spatial analysis aspects of medical geography.

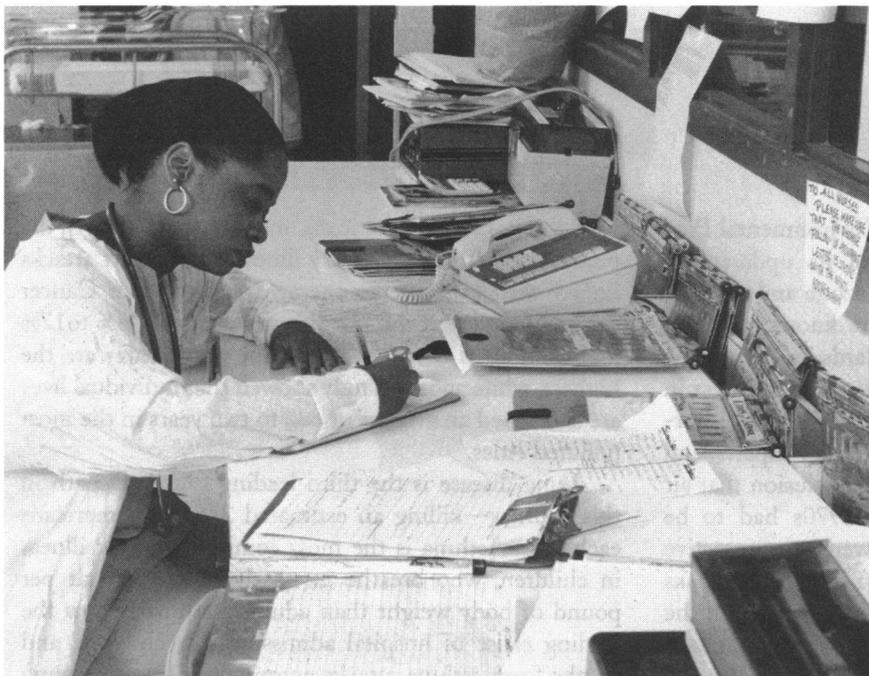
The report was compiled by Thomas C. Ricketts, PhD, Lucy A. Savitz, PhD, Wilbert M. Gesler, PhD, and Diana N. Osborne at the University of North Carolina, Chapel Hill, with support from AHCPR.

One free copy of the publication (No. 97-N013) may be obtained from the AHCPR Clearing House at 800-358-9295. Additional copies are available at the National Technical Information Service at 800-553-6847 (NTIS Accession No. PB97-137707) for \$19.50 paper, \$10.00 microfiche.

Changing Market Causes Nursing School Enrollment Declines

Nursing schools responding to the American Association of Colleges of Nursing (AACN) 1996 enrollment survey showed a 6.2% decline over the previous year in the number of nursing students in entry-level bachelor's degree programs, marking the second consecutive decline.

Interestingly, the decline does not



stem from a reduced applicant pool but from schools reducing the number of students they are willing to accept. Schools cited a number of reasons for this. A shortage of clinical training slots forced many schools to cut back enrollment. The shortage is caused by the increasing demands for physician assistant programs to use available training slots in health care facilities; a reduction in the amount of work available for trainees as hospitals increase emphasis on outpatient care; and pressures for improving the productivity of clinic staffs that used to be partially engaged in student training.

Schools also cut enrollment because of insufficient faculty (cited by 27% of nursing schools) and insufficient clinical or classroom space (23%). Overall, the survey found that the settings in which nurses work are shifting from inpatient units to HMOs, home care, community health, and outpatient hospital care.

Shalala Appoints Policy Group on Academic Centers

Health and Human Services Secretary Donna E. Shalala has established an interagency policy development group to focus on the

Federal role in the future of academic health centers.

Dr. Ciro Sumaya, Acting Deputy Assistant Secretary for Health, will lead the group, which Shalala said will be a focal point for the review and potential revision of Department of Health and Human Services (DHHS) policies affecting academic health centers and other health workforce issues, especially in light of rapid changes in the health care system.

"Most of the policies in effect today which impact on these centers were developed many years ago, and the conditions which led to these policies have changed," Shalala said. The interagency group's recommendations, she said, should include "a targeted set of actions which can be taken at the Federal level to ensure that academic health centers are able to continue to provide their essential public services in a new and evolving health care system."

Academic health centers are focal points of medical research, medical training, and health care for vulnerable populations. More than half of all uncompensated medical care in the United States is provided by academic health care centers.

Dr. Sumaya is former head of DHHS's Health Resources and Services Administration, which has a

leading role in health professions training and in providing health care to medically underserved persons.

Johnson Grant Seeks Increase in Generalists

To help increase the number of generalist physicians and ultimately increase access to primary care, 11 U.S. medical schools have been awarded almost \$3 million in grants under the fifth round of funding of the Robert Wood Johnson Foundation's Generalist Physician Faculty Scholars Program.

To assure access to high quality care at affordable cost, many policy makers have recommended that generalists make up approximately half of the physician supply. Yet in 1994, less than one-quarter of graduating medical students intended to become generalists.

Selected medical schools each received up to \$240,000 for four years to support one outstanding junior faculty member in family medicine, general pediatrics, or general internal medicine. The scholars will serve as role models and mentors for medical students considering careers as generalist physicians. The grants will allow these scholars to enhance their research productivity and participate in primary care education initiatives.

The program is directed for the Johnson Foundation by Evan Charney, MD, Professor and Chairman of the Department of Pediatrics at the University of Massachusetts. The 1997 scholars will use the research component of their grants to study a wide range of topics, including:

- developing physician training programs on palliative care and communication with dying patients;
- conducting a historical survey of physicians' attitudes toward and treatment of child sexual abuse; and
- developing a valid measure of the impact of patients' religious and spiritual beliefs on their health attitudes and the physician-patient relationship.